A scenic photograph of a paved road leading to a red wooden covered bridge. The bridge has yellow interior walls and is surrounded by lush green trees. To the right of the bridge, there is a red octagonal stop sign and a white rectangular sign that reads "BRIDGE WEIGHT LIMIT 8 TONS". The entire image is framed by green geometric shapes on the left and right sides.

# **Information Systems Department (ISD) 2021 Annual Update**



# Agenda

- ↳ About ISD
- ↳ Cybersecurity Review and Recommendation(s)
- ↳ Communication Improvements
- ↳ Clermont County Public Website Rebuild / Refresh - Preview
- ↳ Looking Ahead...

# About ISD

- ↳ The Information Systems Department (ISD) consists of 12 team members across one division and several competencies; The Telecommunications Division (TTD), Customer Support & Outreach, Network Operations, Infrastructure, and Application Development.

Team Members	
Chris Davis (ISD Director)	
Karin Quitter (ISD Program Administrator)	Renee Wilson (Administrative Support Coordinator)
Patty McKinley (TTD Program Manager 1)	Casey Scott (Network Administrator)
Bryan Christ (Systems Analyst Supervisor)	Brennen Hartung (Network Analyst 1)
Kevin Schweitzer (Systems Analyst 3)	Mark Brown (Systems Analyst 1)
Mike Elias (Systems Analyst 2)	Sonya Fung (Systems Analyst 2)
Zac Snider (Systems Analyst 1)	

# Cybersecurity Review & Recommendation(s)

- ▶ Reviewed three sectors to get a current baseline of environment.
  - ▶ Sectors Reviewed: Users, Monitoring / Software Resources, Network (hardware / software).
- ▶ Prioritized sectors for efficient recommendations.
  - ▶ Priority 1 - Users
    - COMPLETED** ▶ Reviewed multiple Security Awareness Platforms and selected KnowBe4.
    - ▶ Priority 2 - Monitoring / Software Resources
      - COMPLETED** ▶ Reviewed multiple Managed Detection and Response providers and selected Crowdstrike Falcon Complete.
      - ▶ Priority 3 - Network (Hardware / Software)
        - ▶ Complete review and recommend any changes needed in 2022.

# Cybersecurity Review & Recommendation(s)

## Priority 1 - Users

- ▶ KnowBe4 provides Clermont County with a security awareness program combined with the ability to simulate phishing attacks.
- ▶ Implemented in June, 2021 and ran our first Phishing Campaign to establish a baseline.

- ▶ Industry Benchmark (Government, 1,000+ users, baseline): 24.4%

Phish-prone %	21.5%
Recipients	1010
Failures	216

- ▶ Second Phishing Campaign was completed in January, 2022.

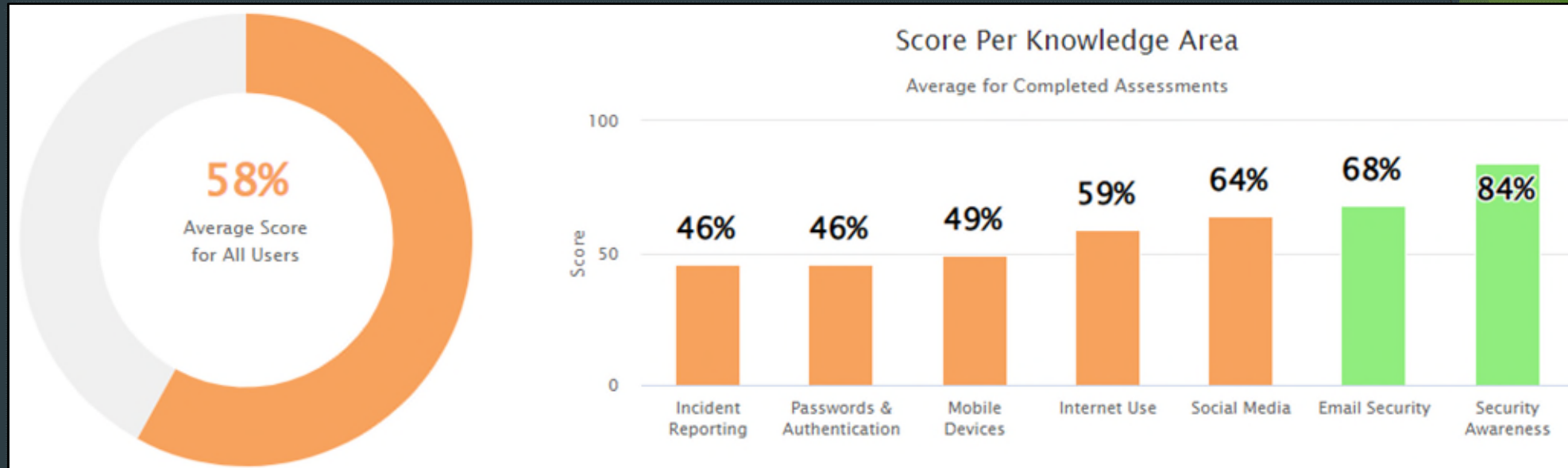
- ▶ Industry Benchmark (Government, 1,000+ users, 1 year): 4.5%

Phish-prone %	5.8%
Recipients	1125
Failures	65

# Cybersecurity Review & Recommendation(s)

## Priority 1 - Users

- ▶ September 2021 we ran our first Security Awareness Proficiency Assessment (SAPA) to get a baseline score.
- ▶ The SAPA asks end-users questions in 7 different knowledge areas.
- ▶ Knowing our strengths and weaknesses is only the first step. Using the results we can create more effective and targeted training campaigns.
  - ▶ Industry Benchmark (Government, 1,000+ Users): 64.8%



# Cybersecurity Review & Recommendation(s)

## Priority 2 - Monitoring / Software Resources

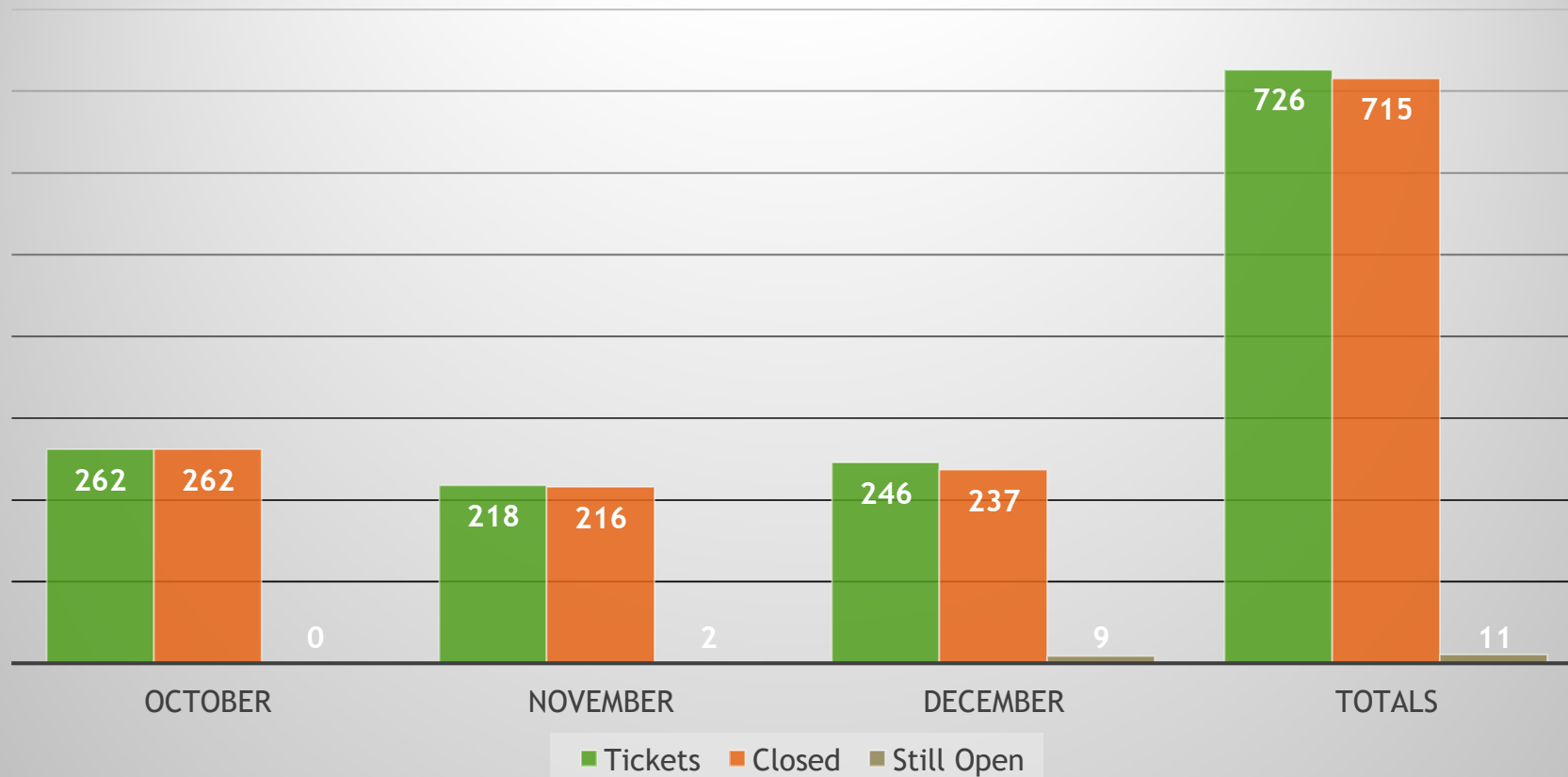
- ▶ Crowdstrike -Falcon Complete provides Clermont County with a Managed Detection and Response (MDR) solution with 24x7x365.
- ▶ 5 Primary Components with 3 Computer and 2 Human.
  - ▶ Falcon Prevent - Next-gen AV. (Computer)
  - ▶ Falcon Discover - IT Hygiene. (Computer)
  - ▶ Falcon Insight - Endpoint Detection and Response. (Computer)
  - ▶ Falcon Complete - Expertise. (Human)
  - ▶ Falcon OverWatch - Managed Threat Hunting. (Human)
- ▶ Implemented in late September, 2021 and by the end of October the environment had been cleaned up and validated to be free of any issues.
  - ▶ Distinct Detections: October - 94, November - 0, December - 7
  - ▶ Total Hunting Leads: 5,104 with 3 investigated.

# Communication Improvements

- ▶ Reviewed the Customer Support Request (ticket system) and found it to be outdated and inefficient in several areas.
  - ▶ No ability to automatically create tickets.
  - ▶ No ability to communicate with end-users, which creates a disconnect between ISD and the end-users.
  - ▶ Ability to provide reports was almost non-existent.
- ▶ Reviewed several ticketing systems and selected Spiceworks Help Desk.
- ▶ Key benefits of Spiceworks Help Desk:
  - ▶ Automatic ticket creation.
  - ▶ Automatic communication between ISD and end-users.
  - ▶ Ability to pull database for advanced reporting features, which allows the collection of metrics to determine successes and areas to improve.

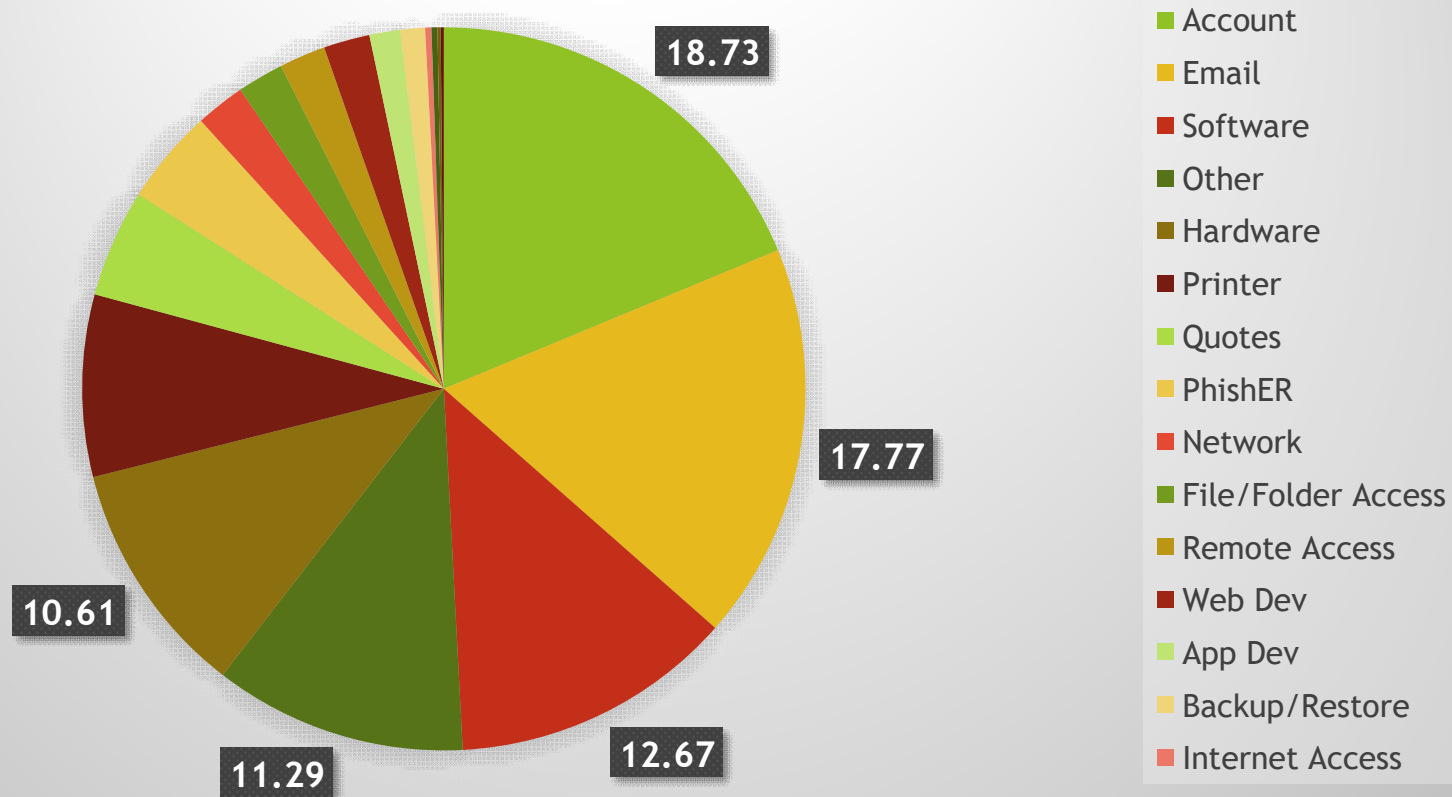
# Communication Improvements

Tickets by Month



# Communication Improvements

Tickets by Category



58 ▼14

New Tickets

1 ▼3

Your Tickets

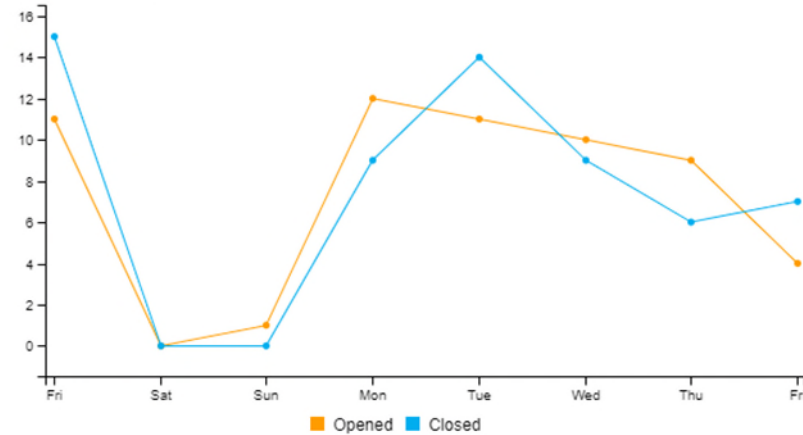
8 ▼1

Open Tickets

1 ▼1

Unassigned Tickets

## Ticket History



## First Response Time

Average

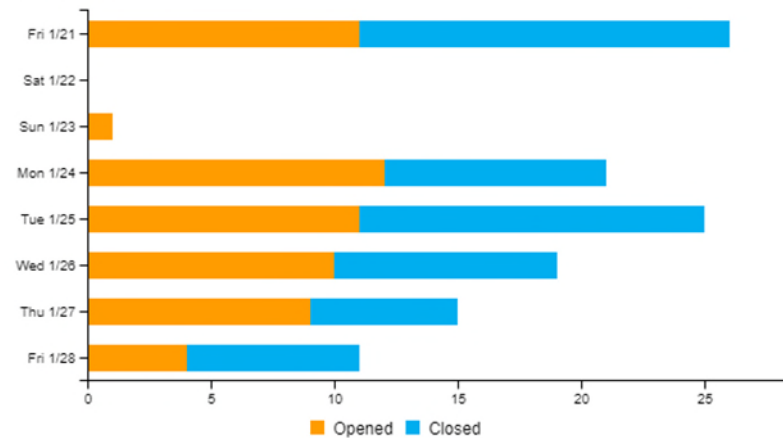
3 hours 10 minutes

## Ticket Close Time

Average

1 day 10 hours

## Ticket Churn



## Category Breakdown



- Account
- Backup / Restore
- Email - Outlook/Permissions/Quarantine
- File/Folder Access
- Hardware
- Internet Access
- Mobile
- Network
- Other
- PC Configuration
- Printer
- Remote Access
- Software
- Web Dev
- Unspecified

# Clermont County Public Website

(Rebuild / Refresh Preview)

- ▶ It is time to rebuild / refresh the Clermont County public website into something that is current and fresh.
- ▶ Current Status:
  - ▶ Created wireframe of main page and a couple sub sites.
  - ▶ Designed, coded, and testing Content Management System (CMS).
- ▶ Next Steps:
  - ▶ Migrate a sub site using the new CMS.
  - ▶ Work with other departments to determine additional needs for their specific web sites.

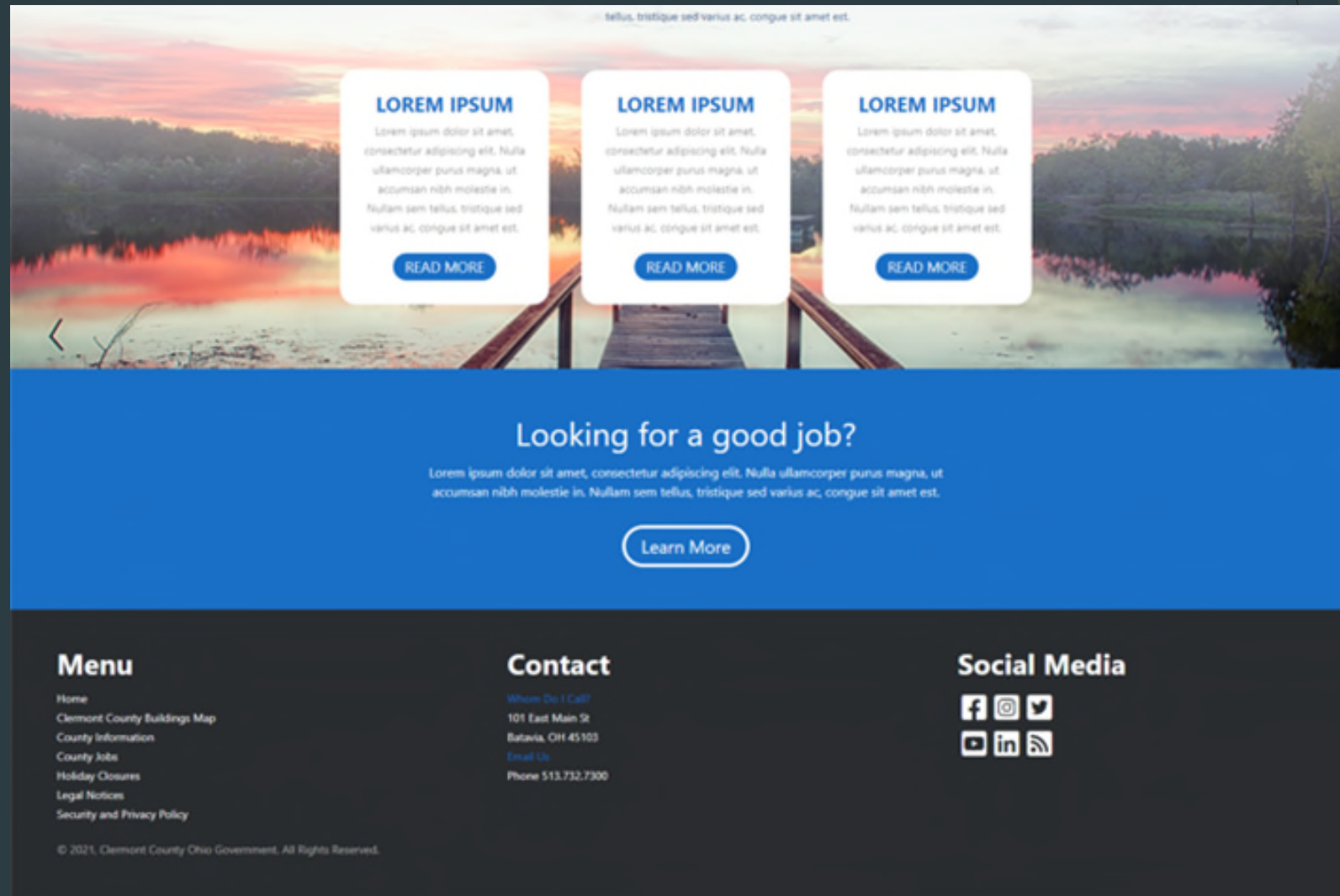
# Clermont County Public Website - Main

(Rebuild / Refresh Preview)



# Clermont County Public Website - Main

(Rebuild / Refresh Preview)



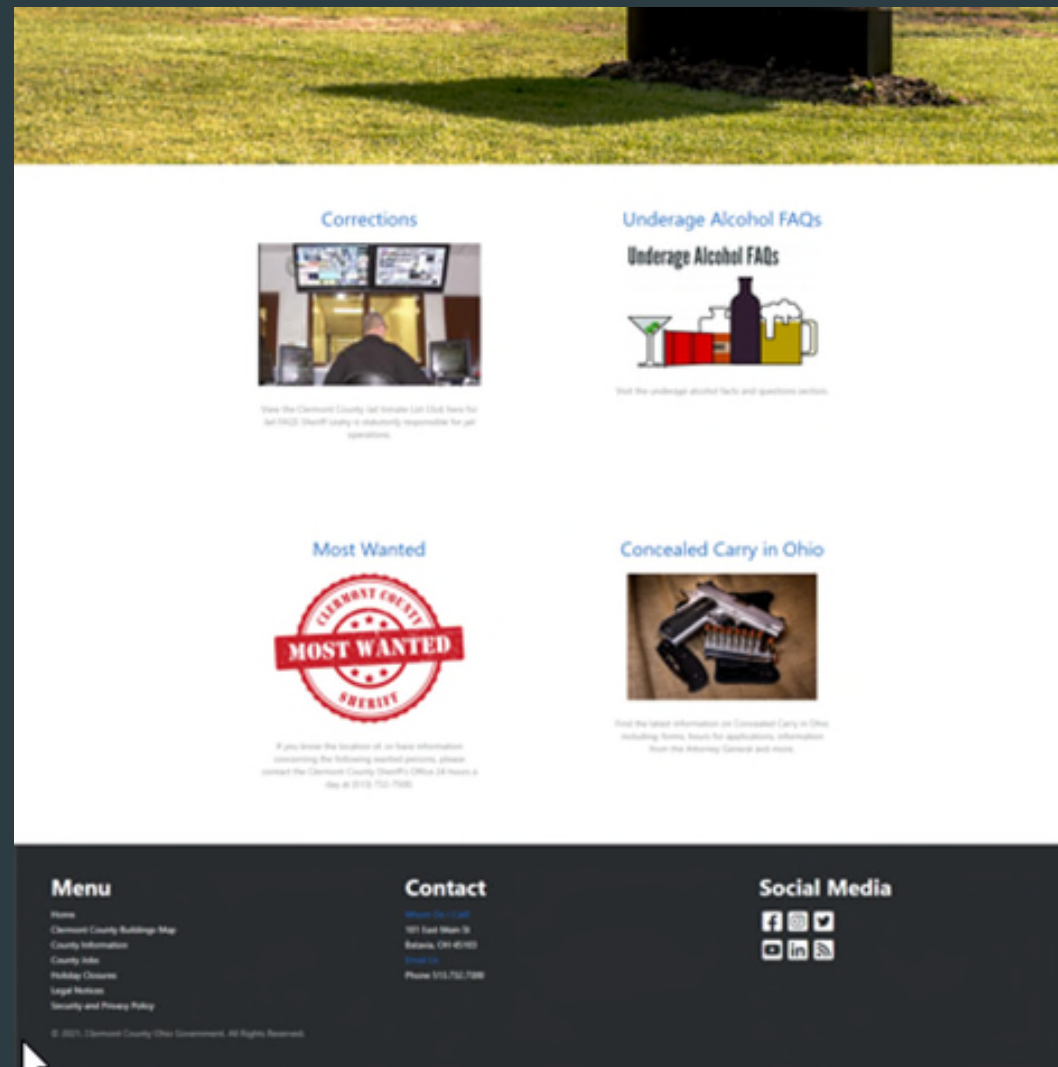
# Clermont County Public Website - Sheriff

(Rebuild / Refresh Preview)



# Clermont County Public Website - Sheriff

(Rebuild / Refresh Preview)



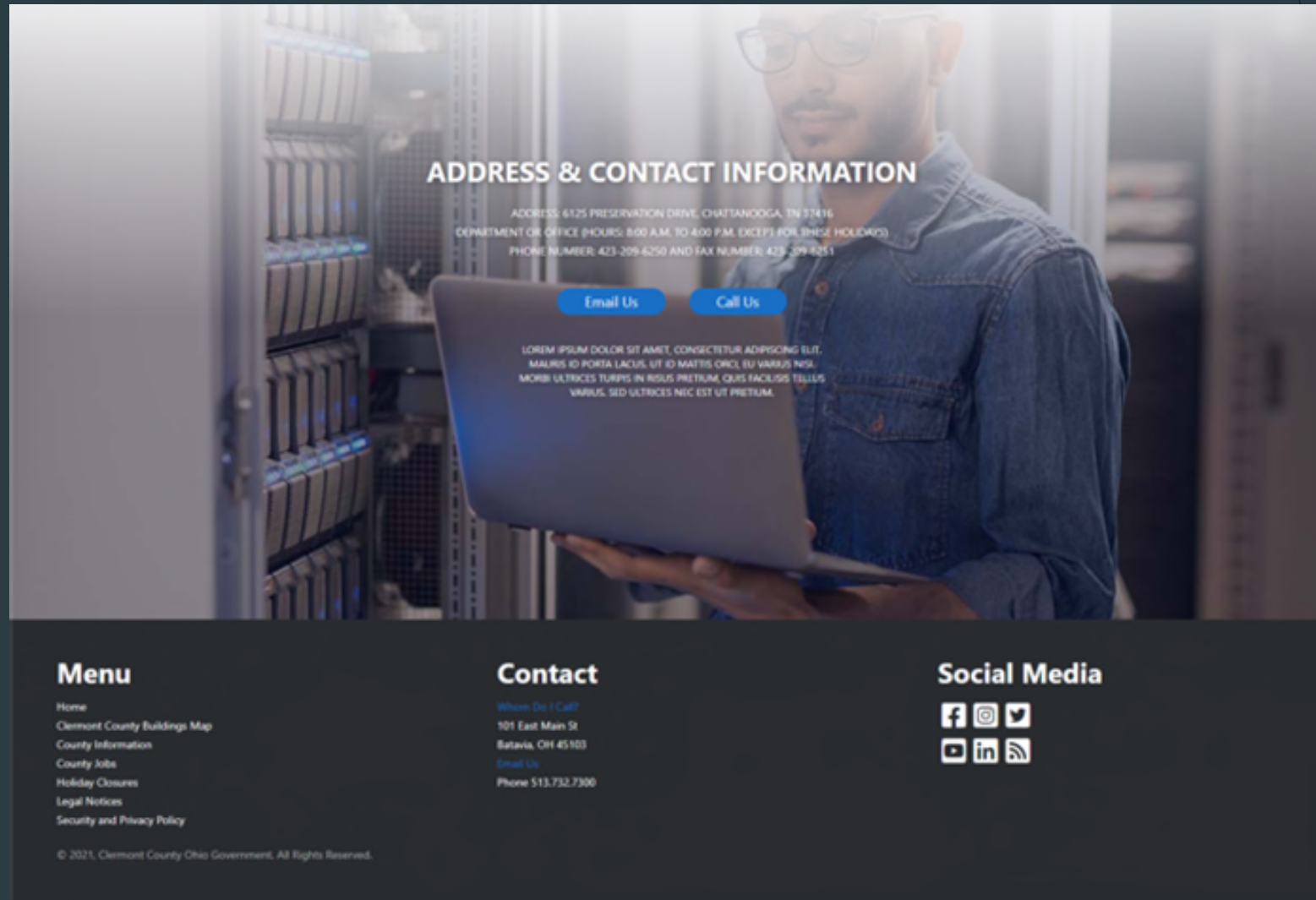
# Clermont County Public Website - ISD

(Rebuild / Refresh Preview)



# Clermont County Public Website - ISD

(Rebuild / Refresh Preview)



# Looking Ahead...

- ▶ Continue Cybersecurity Review & Recommendation(s) for Priority 3 - Network (Hardware / Software).
- ▶ Continue to increase communication between ISD and end-users.
- ▶ Continue reviewing county systems and software.
- ▶ O365 - Pilot Program (2022)
- ▶ Multifactor Authentication
- ▶ Increase Internet Bandwidth.

# Information Systems Department (ISD) 2021 Annual Update

